

CLAIMS

1. A method of sending an electronic message from a sending party to a receiving party, the message being received by the second party with a guarantee, the method  
5 comprising the steps of:

    sending a guarantee request from said sending party to a guarantor;

    attaching a guarantee received from the guarantor to said message; and forwarding said guaranteed message to said  
10 receiving party.

2. A method according to claim 1, wherein said step of sending said guarantee request from said sending party to a guarantor comprises the steps of:

    sending said message from said sending party to an  
15 intermediate party; and

    sending the guarantee request from said intermediate party to a sender's guarantor..

3. A method according to claim 1, wherein prior to said step of sending a message requesting a guarantee, said  
20 intermediate party performs the steps of:

    logging said message from said sending party;

    adding a timestamp to said message;

    adding a reference to said message; and

    verifying said message.

25 4. A method according to claim 3, wherein said message is a message signed with a signature, and the step of verifying said message further comprises verifying the signature.

5. A method according to claim 3, wherein said intermediate party performs the further steps of:

30      determining the sending party's identity;

    determining the guarantor's identity; and

determining the identity of the receiving party's guarantor.

5 6. A method according to claim 5, wherein the step of determining the identity of the receiving party's guarantor comprises contacting the receiving party.

7. A method according to claim 5, wherein the step of sending said guarantee request from the sending party to a guarantor further comprises:

10 sending a guarantee request message from the intermediate party to the receiving party's guarantor.

15 8. A method according to claim 2, wherein the step of sending said message further comprises receiving a guarantee from the sender's guarantor, and said step of attaching the guarantee to the message is performed by the intermediate party.

9. A method according to claim 5, wherein the step of sending said message further comprises receiving a guarantee from the receiver's guarantor.

20 10. A method according to claim 8, wherein the step of attaching the guarantee to the message includes attaching a timestamp and reference to the message, said timestamp and reference having been assigned by the intermediate party on receipt of the message from the sender by the intermediate  
25 party.

11. A method according to claim 10, comprising receiving the guaranteed message at the receiving party from the intermediate party; and verifying a signature applied to the message by the intermediate party.

12. A method according to claim 1, further comprising sending a receipt from the receiving party to the intermediate party after receipt as the guaranteed message.

13. A method according to claim 12, wherein the receipt is  
5 a signed receipt.

14. A method according to claim 12, comprising forwarding the guaranteed message to the sending party with the guarantee received from the receiving party's guarantor.

15. A method of sending a guaranteed message from a sending  
10 party to a receiving party, the method comprising the steps of:

    sending an electronic message from the sending party to an intermediate party;

    obtaining a guarantee at the intermediate party;

15      on receipt of the guarantee, constructing a guaranteed message from the electronic message and the guarantee;

    sending the guaranteed message from the intermediate party to the receiving party..

16. A method according to claim 1, wherein the message sent  
20 from the sending party includes a signature, comprising: logging the message on receipt at the intermediate party; adding a timestamp and a reference to the message and verifying the signature.

17. A method according to claim 16, wherein the step of  
25 constructing the guaranteed message uses the received signed message, the timestamp and the reference.

18. A method according to claim 15, wherein, on receipt of the guaranteed message at the receiving party, the receiving party sends a receipt to the intermediate party.

19. A method according to claim 18, wherein the receipt is signed.

20. A method according to claim 18, wherein, when the receipt is received by the intermediate party, the intermediate party sends a guaranteed receipt to the sending party.

21. A method according to claim 15, further comprising the step of:

obtaining a guarantee from the receiving party guarantor at the intermediate party; and wherein the construction and sending of the guaranteed message occurs only when guarantees are received from the sending party guarantor and the receiving party guarantor.

22. A method according to claim 21, wherein on receipt of the guaranteed message at the receiving party the receiving party sends a receipt to the intermediate party, and the intermediate party adds the guarantee received from the receiving party's guarantor to the receipt to form a guaranteed receipt and sends the guaranteed receipt to the sending party.

23. A method according to claim 21, wherein the step of obtaining a guarantee from a receiving party guarantor by the intermediate party comprises requesting from the receiving party the identity of the receiving party's guarantor and sending a guarantee request to the receiving party guarantor on receipt of their identity.

24. A method of sending a guaranteed message from a sending party to a receiving party comprising the steps of:

sending a signed electronic message from the sending party to an intermediate party;

establishing, at the intermediate party, the identity of a receiving party guarantor;

sending a guarantee request to a sending party guarantor and the receiving party guarantor;

on receipt of a guarantee from each of the sending party guarantor and receiving party guarantor, sending a  
5 guaranteed message from the intermediate party to the receiving party; and

sending a guaranteed receipt from the intermediate party to the sending party after the guaranteed message has been received by the receiving party.

10 25. A method according to claim 24, comprising, on receipt of the signed message by the intermediate party;

logging the signed message;

attaching a timestamp to the signed message;

attaching a reference to the signed message; and

15 verifying the signature.

26. A method according to claim 25, wherein the step of establishing the receiving party's guarantor comprises sending a guarantor identity request from the intermediate party to the receiving party.

20 27. A method according to claim 26, wherein the message is encrypted using public/private key encryption, further comprising requesting the receiving party's public key when the guarantor identity request is sent.

28. A method according to claim 24, wherein prior to  
25 sending the guaranteed receipt to the sending party by the intermediate party, the receiving party sends a signed receipt to the intermediate party.

29. A method of providing on-line notarisation for  
30 electronic messages sent from a sending party to a receiving party, comprising the steps of:

sending a message from the sending party to an intermediate party;

logging receipt of the message at the intermediate party;

applying a timestamp to the message;

assigning a reference to the message;

5 obtaining a guarantee from a sending party guarantor at the intermediate party;

and, on receipt of the guarantee, sending a guaranteed message from the intermediate party to the receiving party.

30. A method according to claim 29, further comprising, on receipt of the guaranteed message at the receiving party:

sending a receipt to the intermediate party;

logging the receipt at the intermediate party;

sending a guaranteed receipt to the sending party.

31. A method according to claim 29, wherein the guaranteed message is logged before it is sent by the intermediate party to the receiving party.

32. Apparatus for sending an electronic message from a sending party to a receiving party, the message being received by the second party with a guarantee, comprising:

20 a message sending device for sending the message from said sending party to a guarantor;

means for attaching a guarantee to said message; and

means for forwarding said guaranteed message to said receiving party.

25 33. Apparatus according to claim 32, further including: an intermediate party; and

means at the intermediate party for sending a message from the intermediate party to a sender's guarantor requesting a guarantee.

30 34. Apparatus according to claim 32, wherein the intermediate party comprises:

a logger for logging said message from said sending party;

a timer for adding a timestamp to said message;

5 a reference adder for adding a reference to said message; and

a verifier for verifying the message.

35. Apparatus according to claim 34, wherein said message is signed with a signature, and the verifier for said message further comprises means for verifying the signature.

10 36. Apparatus according to claim 34, wherein said intermediate party further comprises a sending party identifier for determining the sending party's identity;

a guarantor identifier for determining the guarantor's identity; and

15 a receiving party guarantor identifier for determining the identity of the receiving party's guarantor.

37. Apparatus according to claim 36, wherein the receiving party guarantor identifier comprises means for contacting the receiving party.

20 38. Apparatus according to claim 36, wherein the message sending device further comprises:

means for sending a guarantee request message from the intermediate party to the receiving party's guarantor.

25 39. Apparatus according to claim 33, wherein the message sending device further comprises means for receiving a guarantee from the sender's guarantor; and said intermediate device includes said means for attaching the guarantee to the message is performed by the intermediate party.

30 40. Apparatus according to claim 36, wherein the electronic message sending device further comprises means for receiving a guarantee from the receiver's guarantor.

41. Apparatus according to claim 39, wherein the means for attaching the guarantee to the message includes:

means for attaching a timestamp and reference to the messages, said timestamp and reference having been  
5 assigned by the intermediate party on receipt of the message from the sender by the intermediate party.

42. Apparatus according to claim 41, comprising a receiving party for receiving the guaranteed message from the intermediate party, the receiving party having a verifier  
10 for verifying a signature applied to the message by the intermediate party.

43. Apparatus according to claim 32, further comprising a receipt sender for sending a receipt from the receiving party to the intermediate party after receipt of the  
15 guaranteed message.

44. Apparatus according to claim 43, wherein the receipt sender sends a signed receipt.

45. Apparatus according to claim 43, wherein the intermediate party comprises means for forwarding the  
20 guaranteed message to the sending party with the guarantee received from the receiving party's guarantor.

46. Apparatus for sending a guaranteed message from a sending party to a receiving party, comprising:

a sending party; an intermediate party; a  
25 guarantor; and a receiving party:

wherein the sending party comprises a message sender for sending the message to the intermediate party;  
the intermediate party comprises means for obtaining a  
guarantee from the sending party guarantor; and a guaranteed  
30 message forming and sending device for, on receipt of the



guarantee, constructing a guaranteed message and sending the guaranteed message to the receiving party.

47. Apparatus according to claim 46, wherein the message  
5 sent from the sending party includes a signature, comprising, at the intermediate party, a message logger for logging the message on receipt, a timestamp for adding a timestamp, a referencer for adding a reference to the message, and a verifier for verifying the signature.

10 48. Apparatus according to claim 47, wherein the guaranteed message constructing device attaches the timestamp generated by the timestamp and the reference generated by the reference to the signed message.

49. Apparatus according to claim 46, comprising a receipt  
15 sender at the receiving party for sending a receipt on receipt of the guaranteed.

50. Apparatus according to claim 49, wherein the receipt sender sends a signed receipt.

51. Apparatus according to claim 49, wherein the  
20 intermediate party includes a guaranteed receipt sender for sending a guaranteed receipt to the sender party when the receipt is received from the receiving party.

52. Apparatus according to claim 46, wherein the  
25 intermediate party further comprises means for obtaining a guarantee from a receiving party guarantee at the intermediate party; and wherein the means for constructing and sending the guaranteed message constructs and sends the message occurs only when guarantees are received from the sending party guarantor and the receiving party guarantor.

53. Apparatus according to claim 52, wherein the receiving  
30 party comprises a receipt sender which, on receipt of the

guaranteed message at the receiving party, the receiving party sends a receipt to the intermediate party and the intermediate party comprises a guaranteed receipt sender which adds the guarantee received from the receiving party's guarantor to the receipt to form a guaranteed receipt and sends the guaranteed receipt to the sending party.

54. Apparatus according to claim 42, wherein the intermediate party further includes means for requesting the identity of the receiving party's guarantor and sending a guarantee request to the receiving party guarantor on receipt of that identity.

55. Apparatus for sending a guaranteed electronic message from a sending party to a receiving party, comprising: an intermediate party, wherein the sending party comprises a message sender for sending a signed message to an intermediate party; the intermediate party comprising:

a guarantor identifier for establishing the identity of a receiving party guarantor;

a guarantor request for sending a guarantee request to a sending party guarantor and the receiving party guarantor;

a guaranteed message sender which on receipt of a guarantee from each of the sending party guarantor and receiving party guarantor, sends a guaranteed message from the intermediate party to the receiving party; and

a guaranteed receipt sender for sending a guaranteed receipt from the intermediate party to the sending party after the guaranteed message has been received by the receiving party.

56. Apparatus according to claim 55, wherein the intermediate party further comprises;

a logger for logging the signed message;

a timestamp for attaching a timestamp to the signed message;

a referencer for attaching a reference to the signed message; and

a verifier for verifying the signature.

57. Apparatus according to claim 56, wherein the guarantor  
5 identifier comprises means for sending a guarantor identity request from the intermediate party to the receiving party.

58. Apparatus according to claim 57, wherein the message is encrypted using public/private key encryption, further comprising a public key requestor for requesting the  
10 receiving party's public key when the guarantor identity request is sent.

59. Apparatus according to claim 55, comprising a receipt sender for sending a signed receipt to the intermediate party prior to sending the guaranteed receipt to the sending  
15 party by the intermediate party.

60. Apparatus for providing on-line notarisation for electronic messages sent from a sending party to a receiving party, comprising: an intermediate party;

a message sender for sending a message from the  
20 sending party to the intermediate party;

a logger for logging receipt of the message at the intermediate party;

a timestamper for applying a timestamp to the message;

25 a referencer for assigning a reference to the message;

a guarantee obtainer for obtaining a guarantee from a sending party guarantor at the intermediate party; and

30 a guaranteed message sender for sending, on receipt of the guarantee, a guaranteed message from the intermediate party to the receiving party.

61. Apparatus according to claim 60, further comprising:

a receipt sender for sending a receipt from the receiving party to the intermediate party on receipt of the guaranteed message at the receiving party;

5 a logger for logging the receipt at the intermediate party; and

a guaranteed receipt sender for sending a guaranteed receipt to the sending party.

62. Apparatus according to claim 60, wherein the logger  
10 logs the guaranteed message before it is sent by the intermediate party to the receiving party.

63. An intermediate agent for use in a system for sending an electronic message from a sending party to a receiving party, the message being received by the sending party with  
15 a guarantee, the system including the sending party, the receiving party, and a sending party guarantor; wherein the intermediate agent is arranged to communicate with the sending party, the receiving party and the sending party guarantor and comprises:

20 means for obtaining a guarantee relating to the sending party from the sending party guarantor; and

means for sending the received message as a guaranteed message to the receiving party.

64. An intermediate agent according to claim 63, wherein  
25 the system further comprises: a receiving party guarantor; and the intermediate agent further comprises means for obtaining a guarantee relating to the receiving party from the receiving party guarantor.

65. An intermediate agent according to claim 64, further  
30 comprising means for receiving a receipt from the receiving party when the receiving party has received a guaranteed

message; and means for sending the receipt as a guaranteed receipt to the sending party.

66. An intermediate agent according to claim 63, wherein the means for receiving messages from the send party  
5 comprises a logger for logging the messages.

67. An intermediate agent according to claim 63, wherein the means for receiving messages from the sending party comprises a timestamp for timestamping received messages.

68. An intermediate agent according to claim 63, wherein  
10 the means for receiving messages from the sending party comprises a referencer for assigning references to received messages.

69. An intermediate agent according to claim 63, wherein the received messages are signed and the means for receiving  
15 messages further comprises a verifier for verifying the signature on the messages.

70. An intermediate agent according to claim 63, wherein the means for sending the received message includes a logger for logging the guaranteed messages.

71. An intermediate agent according to claim 64, wherein  
20 the means for obtaining a guarantee relating to the receiving party includes means for obtaining from the receiving party guarantor.